REMARKS

Each of the independent claims is amended. Claims 31 and 32 are amended to correct a claim dependency problem noted in the Official Action. The amendments to the independent claims were made to more clearly point out that which the Applicant considers novel.

Generally, a limited set of orthogonal Walsh codes are available for use in typical code division multiple access networks. In order to increase capacity, cells are disclosed in the prior art to have been sectorized to enable the limited set of orthogonal Walsh codes to be reused in the cell sector. For example, in International Publication Number (PCT) WO 99/60809 to Frederick, a cell is shown divided into three cell sectors, each of which utilizes the limited set of orthogonal Walsh codes. The use of adaptive array antennas, according to this reference, makes it possible to limit the geographic portion to which a transmission is radiated to define the cell portions and to use multiple code sets, one per cell portion or cell sector.

The present invention concerns itself generally with a different problem than what was cited in the above referenced publication also cited in the Official Action. Specifically, the present invention addresses the problem of code unavailability (because all possible codes within a single cell area (either a cell sector or an omni (undivided) cell have been assigned). To avoid denial of service, the present application contemplates assigning a code to a plurality of users within the cell sector or omni-cell. The above cited referenced to Frederick does not contemplate assigning a code from one code set to multiple users within a contiguous cell area (undivided omni-cell or cell sector). To minimize the likelihood of a collision, an algorithm (method) is followed for determining which code of all of the assigned codes should be assigned to a second user. The mobile station originally assigned the selected code is referenced herein as the donor. The method further includes evaluating the likelihood of a collision between the users using the same code and assigning a new code if necessary to avoid the collision.

The algorithm, or method according to one embodiment, includes dividing an area served by one code set (for example, in an omni-cell) into a plurality of zones. The zones are generally used for the logic associated with managing the assignment of codes within

the area served by the one code set. The method thus contemplates evaluating zone relationships between a mobile needing a code and each of the candidate mobile stations (candidate donors) to determine which candidate donor should be selected to have his code assigned to the mobile station requiring a code as well. More generally, however, the invention includes prioritizing codes for re-use within a contiguous cell area in a manner that reduces likelihood of a "collision".

Merely assigning one Walsh code to a plurality of users within a contiguous cell area (cell or cell sector, for example) is novel and not disclosed by the cited art. The above discussion is made to further explain operation and logic corresponding with the assignment of such codes. The cited art further does not disclose such logic.

The Applicant thus requests reconsideration of the claims as amended in view of the above remarks and earnestly solicits a notice of allowance. The Examiner is invited to call the undersigned to discuss the amended claims if doing so would clarify any open issues or questions and would further this application to issuance.

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *jharrison@texaspatents.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Garlick Harrison & Markison Deposit Account No. 502126.

Respectfully submitted,

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